

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P643435

Luminaire Tested: GWS-SA6E-830-U-SLR-W-HSS

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P643435
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-44)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SAGE-830-U-SLR-W-HSS
Description: GALLEON WALL SLIM LUMINAIRE. (6) LIGHTSQUARES WITH 16 LEDS EACH AND
SPILL LIGHT ELIMINATOR RIGHT OPTICS WITH HOUSE SIDE SHIELD
Light Source: (96) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22068.6 lumens
Efficiency: N/A
Efficacy: 68.2 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G4

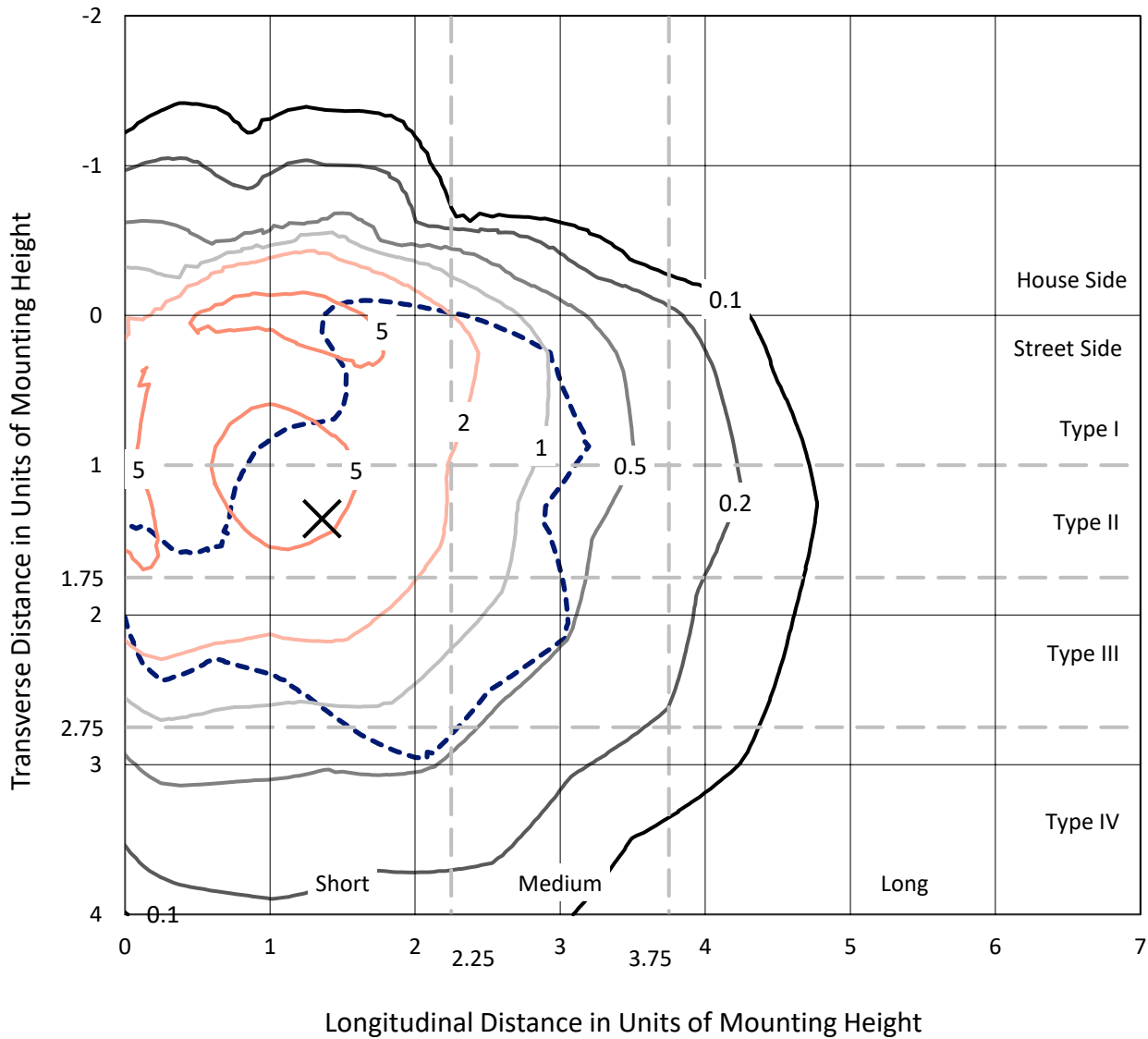
Input Watts (W): 323.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

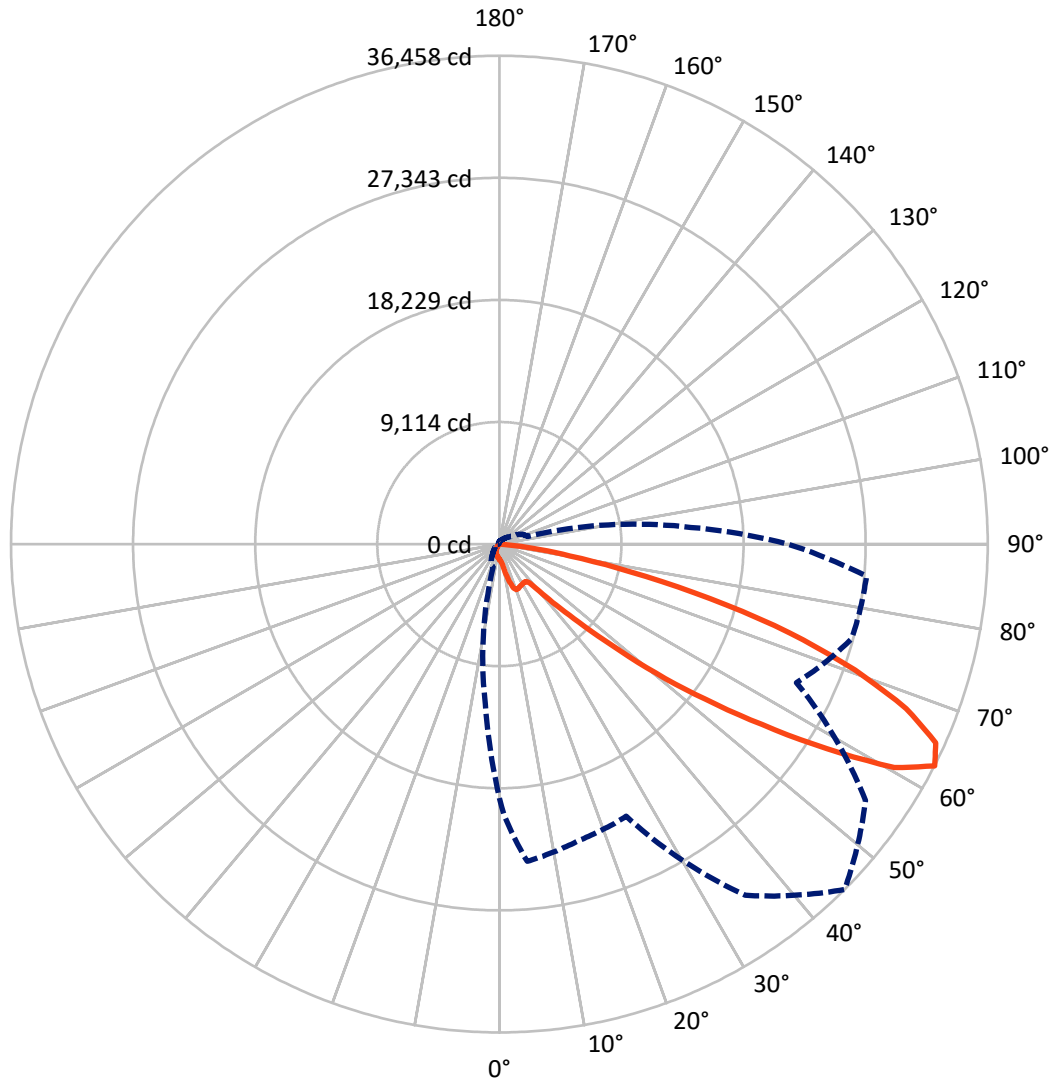
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.2 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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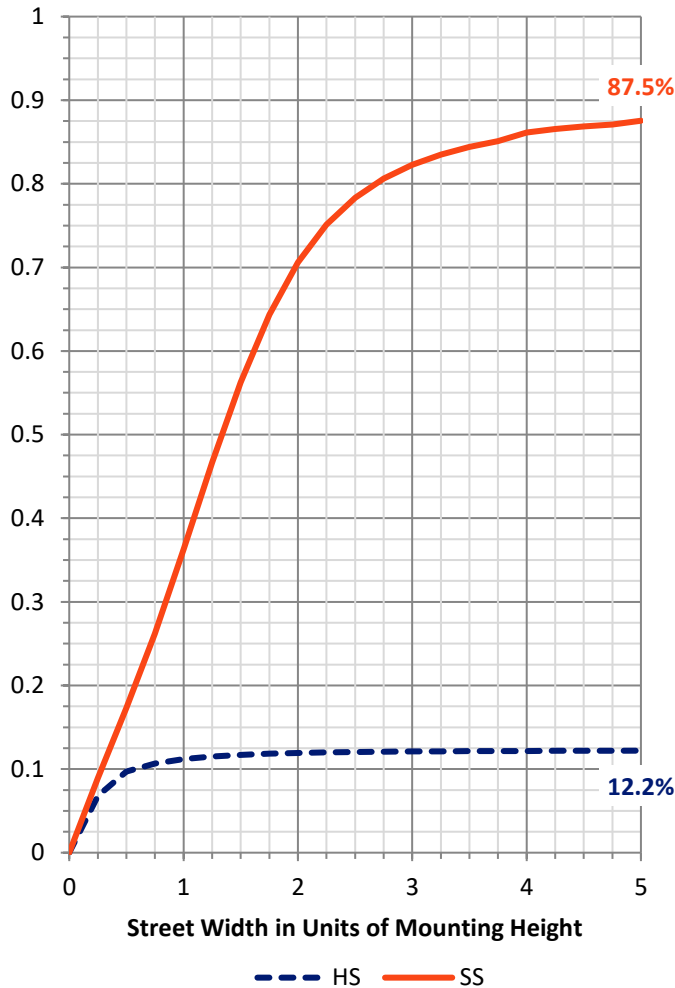
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2723.2	0.0	2723.2
	% Fixture	12.3	0.0	12.3
Street Side	Lumens	19345.4	0.0	19345.4
	% Fixture	87.7	0.0	87.7
Total	Lumens	22068.6	0.0	22068.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.8	0.5
10°-20°	384.8	1.7
20°-30°	836.4	3.8
30°-40°	1372.8	6.2
40°-50°	2523.7	11.4
50°-60°	5419.7	24.6
60°-70°	7279.5	33.0
70°-80°	3790.5	17.2
80°-90°	359.4	1.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	22068.6	100.0
0°-180°	22068.6	100.0

Coefficient of Utilization



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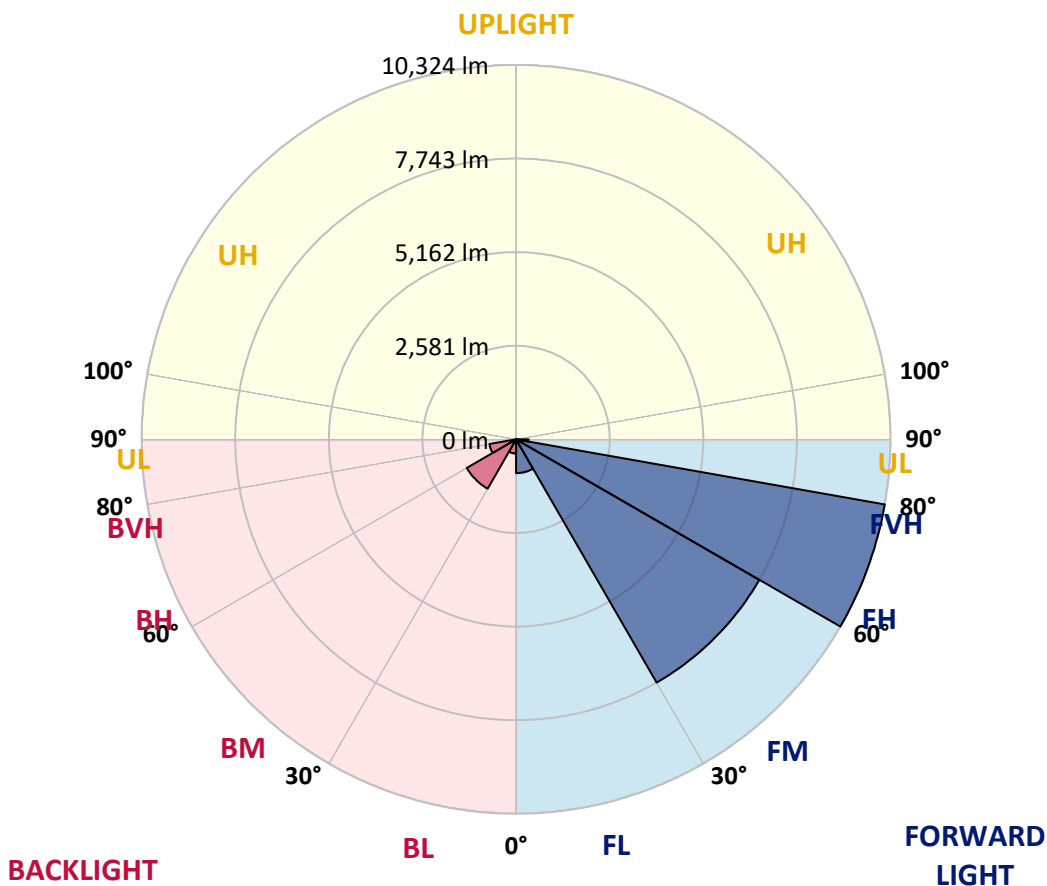
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	932.3	4.2			
FM (30°-60°)	7745.8	35.1			
FH (60°-80°)	10323.9	46.8			G4/12000
FVH (80°-90°)	343.4	1.6			G3/500
BL (0°-30°)	390.6	1.8	B1/500		
BM (30°-60°)	1570.4	7.1	B2/2500		
BH (60°-80°)	746.2	3.4	B2/1000		G2/1000
BVH (80°-90°)	16.0	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1147.1	1147.1	1147.1	1147.1	1147.1	1147.1	1147.1	1147.1	1147.1	1147.1	1147.1
2.5°	1170.0	1175.1	1180.2	1198.1	1210.8	1221.0	1223.6	1215.9	1198.1	1180.2	1154.8
5°	1134.4	1139.5	1157.3	1205.7	1254.2	1292.4	1305.2	1297.5	1254.2	1198.1	1139.5
7.5°	1131.8	1142.0	1185.3	1287.3	1391.8	1470.8	1491.2	1473.4	1391.8	1279.7	1159.9
10°	1223.6	1241.4	1305.2	1488.7	1679.9	1820.1	1876.2	1799.7	1669.7	1465.7	1269.5
12.5°	1463.2	1493.8	1616.1	1883.8	2179.5	2365.6	2442.1	2347.7	2143.8	1848.1	1537.1
15°	1840.5	1886.4	2069.9	2470.1	2819.3	2985.0	3010.5	2957.0	2719.9	2393.6	1975.6
17.5°	2373.2	2439.5	2725.0	3132.9	3385.2	3443.9	3436.2	3380.1	3206.8	2982.5	2587.4
20°	3010.5	3089.5	3369.9	3706.4	3731.9	3663.1	3624.9	3591.7	3533.1	3494.8	3186.4
22.5°	3652.9	3749.8	4042.9	4127.0	3897.6	3698.8	3604.5	3630.0	3716.6	3905.3	3780.3
25°	4292.7	4384.5	4659.8	4432.9	3974.1	3642.7	3522.9	3584.1	3790.5	4198.4	4359.0
27.5°	5039.6	5108.4	5271.6	4642.0	3986.8	3596.8	3479.6	3573.9	3826.2	4381.9	4993.7
30°	5817.1	5857.9	5778.9	4698.0	3943.5	3528.0	3436.2	3573.9	3887.4	4504.3	5470.4
32.5°	6388.1	6395.7	6138.3	4703.1	3920.6	3471.9	3395.4	3558.6	3946.0	4606.3	5931.8
35°	6976.9	6938.7	6482.4	4779.6	3981.7	3492.3	3426.0	3601.9	4037.8	4726.1	6337.1
37.5°	7573.4	7504.6	6867.3	4904.5	4139.8	3714.1	3673.3	3823.7	4185.7	4891.8	6783.2
40°	8185.2	8090.9	7267.5	5093.1	4491.6	4468.6	4608.8	4591.0	4591.0	5103.3	7242.1
42.5°	8932.1	8822.5	7858.9	5625.9	5312.4	5824.7	6207.1	5970.0	5531.6	5590.2	7838.6
45°	9918.6	9824.3	8883.7	6645.6	6599.7	7777.4	8292.3	7823.3	6732.2	6714.4	8835.3
47.5°	11496.5	11478.7	10517.7	7828.4	8175.0	10262.8	11256.9	10354.5	8101.1	7904.8	10721.6
50°	13714.3	13660.7	12554.4	9215.1	10048.6	13342.1	15116.3	13612.3	9755.5	9294.1	13247.8
52.5°	16212.4	16268.5	15406.9	10729.3	12039.5	16768.1	19238.2	17344.2	11552.6	11060.6	16426.5
55°	18565.3	18886.5	18659.6	12500.9	13984.5	20551.0	23765.5	21438.1	13778.0	13372.7	19990.2
57.5°	20405.7	21310.7	22901.3	15075.5	16271.1	24976.3	28820.4	25876.1	16375.6	17127.6	24841.2
60°	20507.7	21705.8	25399.5	20461.8	19212.7	28771.9	33867.6	30212.2	20459.3	23502.9	28641.9
62.5°	18970.6	20255.3	23773.1	22909.0	22417.0	32001.7	36457.6	33373.1	24476.7	27237.4	27515.2
65°	17211.7	18509.2	21958.1	20133.0	22044.8	31864.0	35799.9	33447.0	24841.2	24698.5	25498.9
67.5°	14552.9	15717.9	18840.6	17820.9	20319.1	30326.9	32761.3	31338.9	22886.0	23100.2	23457.0
70°	10622.2	11743.8	14642.2	14693.1	17744.4	27556.0	28150.0	27953.7	21076.1	21303.0	20283.4
72.5°	7672.9	8618.6	11119.3	12049.7	14165.5	23107.8	22697.4	23454.5	18083.5	18973.1	16291.4
75°	5516.3	6225.0	8157.2	10482.0	11228.9	17160.7	16248.1	18165.0	14509.6	16337.3	12248.5
77.5°	2238.1	2487.9	3209.3	7061.1	7379.7	11545.0	9946.7	13194.3	10344.3	10734.4	5936.9
80°	91.8	102.0	132.6	3645.2	5060.0	6495.2	5322.6	7053.4	6831.6	4323.3	1402.0
82.5°	10.2	10.2	22.9	1050.2	2215.2	3584.1	2508.3	4063.3	3459.2	1832.8	637.3
85°	2.5	2.5	5.1	119.8	520.0	573.6	339.0	1246.5	1608.5	749.4	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.7	22.9	25.5	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1147.1	1147.1	1147.1	1147.1	1147.1	1147.1	1147.1	1147.1	1147.1	1147.1	1147.1
2.5°	1154.8	1142.0	1126.7	1111.4	1103.8	1083.4	1075.7	1070.6	1065.5	1068.1	1068.1
5°	1116.5	1088.5	1055.3	1022.2	1004.4	984.0	973.8	968.7	971.2	981.4	981.4
7.5°	1111.4	1057.9	986.5	943.2	922.8	907.5	897.3	892.2	894.7	907.5	912.6
10°	1195.5	1101.2	973.8	899.8	876.9	861.6	851.4	843.8	838.7	848.9	851.4
12.5°	1376.5	1246.5	1034.9	894.7	854.0	833.6	825.9	810.6	803.0	808.1	810.6
15°	1751.2	1526.9	1157.3	915.1	833.6	810.6	797.9	785.1	772.4	769.8	772.4
17.5°	2240.7	1919.5	1343.4	963.6	818.3	790.2	772.4	754.5	736.7	734.1	731.6
20°	2847.4	2401.3	1603.4	1040.0	805.5	772.4	746.9	721.4	698.5	690.8	690.8
22.5°	3400.5	2982.5	1937.3	1134.4	787.7	746.9	716.3	685.7	660.2	647.5	644.9
25°	4076.0	3599.4	2337.5	1244.0	762.2	713.8	680.6	650.0	624.5	609.2	604.1
27.5°	4756.7	4249.4	2791.3	1386.7	731.6	680.6	650.0	622.0	593.9	576.1	571.0
30°	5416.9	4950.4	3301.1	1565.2	708.7	647.5	622.0	593.9	568.5	540.4	532.8
32.5°	6125.5	5666.7	3872.1	1764.0	690.8	624.5	596.5	571.0	537.9	512.4	499.6
35°	6808.7	6405.9	4501.8	1957.7	673.0	604.1	573.6	548.1	512.4	484.3	466.5
37.5°	7497.0	7157.9	5159.4	2075.0	647.5	576.1	548.1	527.7	486.9	453.7	433.4
40°	8226.0	7935.4	5870.6	2026.6	624.5	545.5	530.2	507.3	461.4	423.2	397.7
42.5°	9026.4	8677.2	6594.6	1840.5	604.1	520.0	504.7	481.8	438.4	392.6	359.4
45°	10033.3	9490.4	7188.5	1560.1	614.3	494.5	463.9	458.8	418.1	359.4	318.6
47.5°	11764.2	10739.5	7649.9	1379.1	683.2	466.5	430.8	443.5	400.2	326.3	280.4
50°	14412.7	12809.3	8080.7	1366.3	787.7	453.7	400.2	433.4	382.4	293.1	247.3
52.5°	16936.4	14912.4	8356.0	1478.5	879.4	486.9	369.6	420.6	369.6	270.2	224.3
55°	19350.4	16125.8	7864.0	1560.1	966.1	586.3	346.7	400.2	354.3	257.5	216.7
57.5°	21953.0	16666.2	6191.8	1725.8	1027.3	670.4	351.8	369.6	333.9	249.8	214.1
60°	22730.5	15975.4	3737.0	1942.4	994.2	695.9	390.0	328.8	305.9	234.5	206.5
62.5°	21522.2	14336.3	2205.0	1769.1	966.1	657.7	446.1	303.3	277.9	214.1	191.2
65°	19714.9	12110.9	1437.7	1493.8	1024.7	586.3	474.1	290.6	252.4	193.7	168.2
67.5°	17650.1	9755.5	1006.9	882.0	945.7	527.7	400.2	288.1	226.9	163.1	137.7
70°	14866.5	7305.8	708.7	583.7	787.7	469.0	311.0	280.4	198.8	132.6	107.1
72.5°	11486.3	4573.1	527.7	377.3	560.8	382.4	247.3	237.1	160.6	109.6	81.6
75°	8470.7	2607.8	372.2	272.8	369.6	290.6	183.5	168.2	137.7	104.5	73.9
77.5°	4422.7	1305.2	232.0	209.0	211.6	181.0	132.6	122.4	127.5	104.5	68.8
80°	848.9	260.0	140.2	152.9	114.7	114.7	96.9	102.0	112.2	84.1	58.6
82.5°	354.3	56.1	76.5	86.7	71.4	79.0	79.0	81.6	79.0	61.2	43.3
85°	0.0	0.0	33.1	35.7	48.4	48.4	40.8	40.8	40.8	35.7	25.5
87.5°	0.0	0.0	0.0	0.0	2.5	7.6	15.3	17.8	20.4	15.3	10.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	1147.1	1147.1	1147.1	1147.1	1147.1	1147.1	1147.1	1147.1	1147.1	1147.1	1147.1
2.5°	1065.5	1060.4	1068.1	1073.2	1078.3	1078.3	1073.2	1068.1	1060.4	1068.1	1060.4
5°	984.0	991.6	1004.4	1009.5	1014.6	1004.4	999.3	984.0	971.2	973.8	968.7
7.5°	920.2	927.9	943.2	953.4	953.4	948.3	933.0	917.7	897.3	897.3	894.7
10°	861.6	871.8	889.6	902.4	907.5	902.4	887.1	866.7	848.9	848.9	841.2
12.5°	813.2	825.9	846.3	864.2	869.3	864.2	848.9	828.5	808.1	808.1	803.0
15°	772.4	787.7	810.6	831.0	838.7	831.0	813.2	787.7	767.3	769.8	762.2
17.5°	734.1	746.9	777.5	800.4	808.1	800.4	777.5	744.3	724.0	729.0	724.0
20°	690.8	706.1	736.7	762.2	769.8	762.2	736.7	701.0	680.6	680.6	683.2
22.5°	644.9	660.2	690.8	708.7	718.9	711.2	685.7	652.6	632.2	632.2	634.7
25°	604.1	611.8	634.7	652.6	655.1	647.5	627.1	601.6	586.3	593.9	596.5
27.5°	565.9	565.9	576.1	586.3	583.7	576.1	568.5	548.1	545.5	553.2	560.8
30°	525.1	512.4	507.3	499.6	497.1	494.5	502.2	502.2	507.3	517.5	525.1
32.5°	489.4	463.9	441.0	418.1	405.3	415.5	435.9	453.7	471.6	486.9	494.5
35°	448.6	407.9	369.6	339.0	318.6	333.9	367.1	400.2	430.8	451.2	463.9
37.5°	407.9	349.2	303.3	265.1	249.8	262.6	298.2	344.1	390.0	415.5	433.4
40°	364.5	290.6	237.1	206.5	191.2	203.9	239.6	285.5	346.7	379.8	402.8
42.5°	321.2	239.6	191.2	160.6	152.9	160.6	188.6	234.5	300.8	341.6	372.2
45°	277.9	198.8	152.9	130.0	122.4	130.0	152.9	191.2	257.5	303.3	339.0
47.5°	239.6	168.2	127.5	107.1	102.0	109.6	127.5	160.6	216.7	262.6	303.3
50°	209.0	147.8	109.6	91.8	86.7	94.3	109.6	135.1	183.5	224.3	267.7
52.5°	188.6	137.7	96.9	79.0	76.5	81.6	94.3	114.7	155.5	191.2	232.0
55°	183.5	137.7	89.2	71.4	68.8	73.9	84.1	99.4	135.1	165.7	201.4
57.5°	188.6	147.8	84.1	61.2	58.6	63.7	73.9	86.7	117.3	142.8	175.9
60°	188.6	150.4	73.9	48.4	45.9	51.0	61.2	76.5	104.5	124.9	152.9
62.5°	170.8	137.7	61.2	38.2	33.1	38.2	51.0	63.7	91.8	112.2	135.1
65°	147.8	117.3	51.0	28.0	22.9	28.0	40.8	53.5	79.0	96.9	122.4
67.5°	119.8	89.2	38.2	20.4	15.3	20.4	30.6	43.3	66.3	84.1	109.6
70°	89.2	63.7	30.6	17.8	15.3	17.8	28.0	40.8	58.6	76.5	102.0
72.5°	66.3	43.3	25.5	17.8	12.7	17.8	25.5	38.2	56.1	73.9	96.9
75°	56.1	35.7	22.9	15.3	12.7	15.3	22.9	35.7	51.0	68.8	91.8
77.5°	53.5	33.1	20.4	12.7	10.2	12.7	20.4	30.6	45.9	63.7	89.2
80°	45.9	28.0	17.8	10.2	7.6	10.2	17.8	25.5	35.7	48.4	68.8
82.5°	35.7	22.9	12.7	5.1	2.5	5.1	12.7	15.3	22.9	28.0	40.8
85°	22.9	12.7	5.1	0.0	0.0	0.0	5.1	10.2	10.2	12.7	20.4
87.5°	10.2	2.5	0.0	0.0	0.0	0.0	0.0	0.0	2.5	5.1	7.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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 CATALOG NUMBER: GWS-SA6E-830-U-SLR-W-HSS

CANDELA DISTRIBUTION (continued):

	285°	295°	305°	315°	325°	335°	345°	355°	359°	360°
0°	1147.1	1147.1	1147.1	1147.1	1147.1	1147.1	1147.1	1147.1	1147.1	1147.1
2.5°	1075.7	1078.3	1083.4	1091.0	1108.9	1124.2	1139.5	1159.9	1170.0	1170.0
5°	973.8	976.3	978.9	989.1	1014.6	1034.9	1068.1	1108.9	1129.3	1134.4
7.5°	894.7	899.8	904.9	912.6	938.1	966.1	1009.5	1085.9	1124.2	1131.8
10°	848.9	856.5	866.7	882.0	904.9	935.5	1009.5	1147.1	1210.8	1223.6
12.5°	813.2	825.9	836.1	854.0	882.0	930.4	1078.3	1320.4	1432.6	1463.2
15°	777.5	792.8	808.1	825.9	856.5	948.3	1210.8	1631.4	1817.5	1840.5
17.5°	741.8	759.6	780.0	800.4	838.7	991.6	1419.9	2062.2	2322.3	2373.2
20°	701.0	724.0	752.0	777.5	820.8	1060.4	1710.5	2574.6	2900.9	3010.5
22.5°	657.7	685.7	718.9	752.0	800.4	1144.6	2062.2	3125.2	3581.5	3652.9
25°	622.0	650.0	680.6	713.8	767.3	1246.5	2487.9	3808.4	4223.9	4292.7
27.5°	588.8	616.9	644.9	675.5	734.1	1379.1	3000.3	4534.9	4968.2	5039.6
30°	553.2	586.3	614.3	644.9	703.6	1542.2	3591.7	5340.4	5750.8	5817.1
32.5°	522.6	555.7	583.7	614.3	680.6	1720.7	4213.7	6054.2	6388.1	6388.1
35°	497.1	532.8	553.2	593.9	662.8	1835.4	4802.5	6734.8	6987.1	6976.9
37.5°	469.0	512.4	527.7	555.7	639.8	1848.1	5355.7	7453.6	7639.7	7573.4
40°	441.0	486.9	509.8	525.1	614.3	1743.6	5962.4	8113.9	8271.9	8185.2
42.5°	415.5	451.2	484.3	502.2	599.0	1560.1	6449.3	8820.0	9008.6	8932.1
45°	390.0	420.6	441.0	474.1	609.2	1432.6	6867.3	9643.3	9974.7	9918.6
47.5°	364.5	390.0	402.8	453.7	678.1	1374.0	7122.2	10917.9	11542.4	11496.5
50°	336.5	367.1	367.1	448.6	780.0	1394.4	7344.0	12763.5	13729.6	13714.3
52.5°	308.4	341.6	336.5	486.9	859.1	1488.7	7596.4	14392.3	16072.2	16212.4
55°	280.4	311.0	316.1	563.4	904.9	1570.3	6620.1	15078.1	18073.3	18565.3
57.5°	249.8	267.7	328.8	622.0	889.6	1807.3	4534.9	15203.0	19350.4	20405.7
60°	216.7	232.0	372.2	609.2	841.2	1669.7	2855.0	14081.4	19169.4	20507.7
62.5°	188.6	214.1	392.6	537.9	856.5	1447.9	1820.1	12001.3	17443.6	18970.6
65°	165.7	206.5	356.9	486.9	866.7	981.4	1228.7	9763.1	15758.7	17211.7
67.5°	147.8	229.4	293.1	433.4	744.3	690.8	843.8	7586.2	13250.3	14552.9
70°	135.1	234.5	239.6	372.2	576.1	443.5	555.7	5105.9	9133.5	10622.2
72.5°	122.4	173.3	181.0	298.2	372.2	270.2	359.4	2921.3	6658.3	7672.9
75°	117.3	117.3	124.9	193.7	206.5	196.3	232.0	1743.6	4774.5	5516.3
77.5°	109.6	89.2	79.0	124.9	112.2	140.2	137.7	774.9	2069.9	2238.1
80°	86.7	63.7	53.5	79.0	76.5	94.3	81.6	63.7	94.3	91.8
82.5°	53.5	40.8	38.2	48.4	43.3	48.4	38.2	10.2	10.2	10.2
85°	25.5	22.9	20.4	20.4	22.9	20.4	15.3	5.1	2.5	2.5
87.5°	12.7	12.7	10.2	7.6	10.2	10.2	7.6	2.5	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

MCGRAW EDISON

Report Number: SP1-2408-195-9

Test Date: 08/07/2024

Luminaire Tested: GALN-SB1A-830-U-5WQ

Data in this report applies to families of products including GALN-SB1A-830-U-5WQ.

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2408-195-9
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 08/07/2024
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: MCGRAW EDISON
 Catalog Number: **GALN-SB1A-830-U-5WQ**
 Description: GALLEON AREA AND ROADWAY LUMINAIRE. (1) 80 CRI, 3000K, 350MA HIGH DENSITY LIGHTSQUARE WITH 26 LEDS AND TYPE V WIDE OPTICS

Spectral Parameters

CCT (K): 3050
 CIE u': 0.2476
 CIE v': 0.5251
 Duv: 0.0034
 CIE x: 0.4383
 CIE y: 0.4131
 CIE z: 0.1487
 Peak Wavelength (nm): 603
 Dominant Wavelength (nm): 581
 Purity: 55.55201
 Rf: 81.5
 Rg: 99.2

CRI (Ra):	81.0		
R1:	79.6	R9:	7.1
R2:	85.6	R10:	67.0
R3:	92.0	R11:	82.7
R4:	82.6	R12:	63.2
R5:	78.9	R13:	80.3
R6:	81.7	R14:	95.0
R7:	85.2	R15:	71.7
R8:	62.0		



Test Conditions

Stabilization Time: 20M
 Operation Time: 1H 20M
 Sphere Temperature (°C): 24.2

REPORT NUMBER: SP1-2408-195-9

Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085	10/24/2023	10/24/2024
Room Thermometer	IN0046	10/24/2023	10/24/2024

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CIE 1931 Chromaticity Diagram



CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength



Photopic Lumens: NR

λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)	λ (nm)	Power W [^] /nm	Lumens (ϕ /nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2408-195-9

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.27

λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2408-195-9

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.32

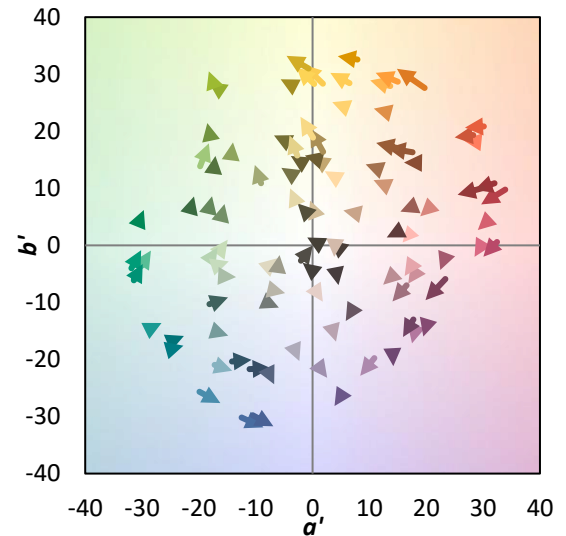
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

Summary

$R_f = 81.5$
 $R_g = 99.2$
 $CIE R_a = 81.0$
 $R_9 = 7.1$



Color Vector Graphics

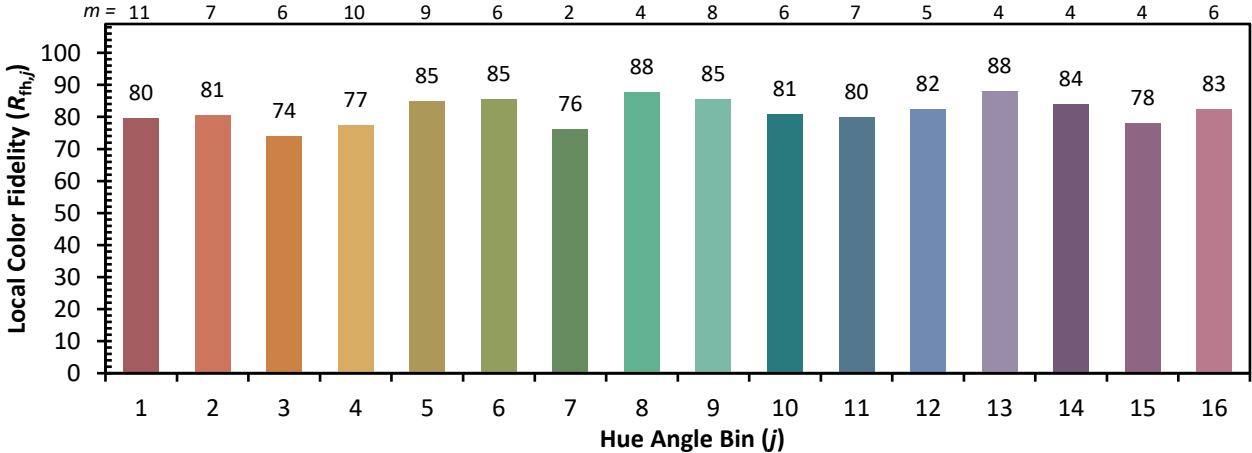


Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82 = 95
CES08 = 41	CES33 = 71	CES58 = 78	CES83 = 90
CES09 = 29	CES34 = 82	CES59 = 92	CES84 = 94
CES10 = 76	CES35 = 90	CES60 = 95	CES85 = 86
CES11 = 59	CES36 = 93	CES61 = 93	CES86 = 72
CES12 = 65	CES37 = 87	CES62 = 83	CES87 = 85
CES13 = 43	CES38 = 75	CES63 = 77	CES88 = 83
CES14 = 74	CES39 = 94	CES64 = 83	CES89 = 75
CES15 = 71	CES40 = 89	CES65 = 77	CES90 = 81
CES16 = 47	CES41 = 85	CES66 = 80	CES91 = 96
CES17 = 50	CES42 = 86	CES67 = 79	CES92 = 73
CES18 = 56	CES43 = 81	CES68 = 84	CES93 = 84
CES19 = 72	CES44 = 99	CES69 = 91	CES94 = 64
CES20 = 66	CES45 = 87	CES70 = 78	CES95 = 80
CES21 = 87	CES46 = 82	CES71 = 76	CES96 = 84
CES22 = 79	CES47 = 77	CES72 = 92	CES97 = 87
CES23 = 92	CES48 = 71	CES73 = 71	CES98 = 81
CES24 = 91	CES49 = 81	CES74 = 93	CES99 = 74
CES25 = 72	CES50 = 89	CES75 = 74	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)